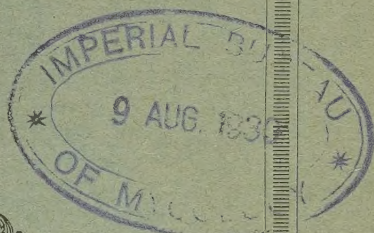


HONG KONG  
REPORT  
OF THE  
**BOTANICAL AND FORESTRY  
DEPARTMENT**

FOR THE YEAR

1929



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## HONG KONG.

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### REPORT ON THE BOTANICAL AND FORESTRY DEPARTMENT FOR THE YEAR 1929.

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#### GENERAL REMARKS.

The weather during the early part of the year was most unfavourable for both gardening and forestry operations; owing to the lack of rain, all tree planting was much delayed. In the latter part of the year many forest fires occurred during the frequent exceptionally dry periods.

The rainfall for the year was 71.16 inches in 128 days as against 80.89 inches on 138 days in 1928.

Typhoon signals were hoisted on three occasions during the year. The typhoon which passed to the south of the Colony on August 22nd caused extensive damage to trees on roadsides, in plantations and in the Botanical Gardens.

#### GARDENS, PARKS AND GROUNDS.

*Botanic Gardens.*—A further area of the Old Garden was made available for planting by the terracing of the steep banks on the south side; owing to the difficult nature of the ground in this area, no cultivation had been attempted there since the Gardens were first formed.

The stages in the plant houses were reduced in size, thus opening up much more walking space for the numerous visitors.

Thirteen of the largest trees in the Gardens were blown down by the gale on August 22nd, the largest of them being a *Grevillea robusta*, which had stood in the New Garden for over 40 years; many other smaller specimen trees and ornamental shrubs were blown down, but the majority of them were saved by being promptly raised and supported.

Work in connection with the removal of large tree stumps, damaged portions of trees, and shrubs was still proceeding at the end of the year.

The bamboo roofing of the plant houses was blown away by the gale, but the damage among the pot plants was comparatively light.



The reconditioning of the Aviary was completed by the Public Works Department and the whole structure is now rat proof.

The damage done to lawns by Grass Caterpillars (*Thialleta signifera*) during the autumn was negligible.

An avenue of young trees of *Grevillea robusta* was planted on the grass banks bordering the path immediately adjoining the Fountain Terrace.

The total number of trees, shrubs and pot plants sold during the year was 1,896.

*Government House Grounds.*—A very large Banian (*Ficus retusa*) which stood on the lawn immediately in front of the main entrance to the house was blown down on August 22nd; many other trees, particularly Flame of the Forest, were almost entirely stripped of their largest limbs.

Tennis lawns, bowling greens, flower beds and shrubberies were given such attention as they required.

The interior of the house was decorated on several occasions during the year.

*Mountain Lodge Grounds.*—An additional flower bed was made and planted with *Hydrangea hortensia* on the spare ground at the base of flagstaff hill.

Young trees of *Cupressus macrocarpa* and *Casuarina equisetifolia* were planted in various parts of the grounds.

The valley and outer portions of the grounds were cleared of undesirable undergrowth; tennis lawns and other turfed areas were given such attention as they required.

*Colonial Cemetery.*—A number of indigenous and other trees which were becoming a danger to headstones and graves were removed.

Several very large specimens of *Araucaria excelsa* were destroyed by the gale on August 22nd and many other trees were severely damaged. Felling of dangerous trees and branches was still proceeding at the end of the year.

The turfed areas were given such attention as they required; outer areas were regularly cleared of undergrowth.

*Kowloon Hospital Grounds.*—The exposed position of these grounds makes the work of establishing trees or shrubs very difficult, numbers of such hardy plants as Azalea (*Rhododendron indicum*) and *Archontophoenix Alexandrae* have been killed by the prevailing winds. In order to provide shelter for less hardy plants, 755 one year old *Pinus Massoniana* were planted.

A large number of *Hibiscus Lambertianus* and *Livistona chinensis* were planted in various parts of the grounds, where the majority made slow progress up to the end of the year.

Two additional Bamboo hedges were planted in rear of the hospital buildings.

Undergrowth was regularly cleared from banks, tennis lawns and the extensive turfed areas were given such attention as they required.

*Blake Garden, West End Park, King's Park, Civil Hospital, Mental Hospital, Senior Officers' Quarters, Leighton Hill, Indian School, Volunteer Headquarters, Statue Square Plots, Victoria Hospital, Homestead Quarters, Government Pavilions and Villas, Royal Observatory, Kowloon Magistracy, Colonial Secretary's Residence, The Eyrie, Government Offices and Queen's Gardens.* The grounds or such portions of them as are under the control of this Department were kept in good order during the year, additional planting of trees and flowering shrubs was carried on, and grass lawns, banks, trees and shrubs were given such attention as they required.

*Decoration.*—The City Hall, Queen's Pier and the Hong Kong Cricket Club grounds were decorated on the occasion of the visit of H.R.H. the Duke of Gloucester.

Queen's Pier was decorated on several other occasions, during the year.

#### HERBARIUM AND LIBRARY.

During the year 10 new books were added to the library and 518 bulletins, pamphlets and other publications were received.

Fifty-eight plant specimens were added to the herbarium.

#### FORESTRY.

*Formation of Pine Tree Plantations.*—The number of sowings in situ of *Pinus Massoniana* during the year amounted to 250,480, the areas reafforested were Mount Collinson, West Bay, Pokfulum Valley, Kowloon Bay, Shek Li Pui Catchment Area, Kowloon Tsai, Taipo Kau Forestry Reserve and ground adjoining Ping Shan Land Office; on a number of the areas seeds of *Leucaena glauca* were mixed and sown with the Pine seeds.

On grassy areas, seeds of *Pinus Massoniana* and *Leucaena glauca* were sown by the broadcast method; the total weight of seeds used for all sowings during the year were *Pinus Massoniana* 1,725 pounds and *Leucaena glauca* 250 pounds.



*Broad-leaved Trees Planted.*—Plantations of varying sizes composed of the following trees were formed in Taipo Kau Forestry Reserve, Mount Collinson Prohibited Area, low hills at Fan Ling and sheltered areas in various parts of the Colony:—*Acacia pennata*, *Acacia confusa*, *Bischofia javanica*, *Aleurites montana*, *Aleurites Fordii*, *Sterculia lanceolata*, *Melia Azedarach*, *Quercus Edithae*, *Tristania conferta*, *Crataeva religiosa*, *Spathodea nilotica*, *Achras sapota*, *Cinnamomum Camphora*, *Cupressus macrocarpa*, *Casuarina equisetifolia*, *Celtis sinensis*, *Adenanthera intermedia*, the total number of trees so planted was 26,000.

Shade and decorative trees were planted in the vicinity of all outlying roads in Hong Kong and the New Territories, but this work was much delayed owing to the lack of rain during the planting season.

*Miscellaneous Planting.*—Groups of flowering trees and shrubs were planted on open spaces in the vicinity of public roads.

The Indian Cemetery in Kowloon was planted with shade and flowering trees.

*Trees Felled.*—In connection with road widening due to the increase of motor traffic, large roadside trees were removed from the following places, Bowen Road, Magazine Gap, Bowrington Canal Road, Garden Road and Morrison Hill Road.

Fellings of large numbers of Pine and wild trees were necessitated by the extension of Aberdeen and Kowloon Reservoirs, extensions of public roads and the development of building sites.

*Storm Damage.*—The whole of the forestry staff was engaged for over one month in clearing away numerous large trees which were killed or severely damaged by the gale on August 22nd; the work of dealing with the lesser damage was still proceeding at the end of the year.

*Undergrowth Clearing.*—The total area cleared in Hong Kong and the New Territories in connection with anti-malarial measures was 2,920,440 square feet. For other purposes, such as clearing of cemeteries, cutting of survey traces, road making, nullah training and other public improvements the area cleared amounted to 4,413,315 square feet.

*Protection of Plantations.*—The fire barriers in Taipo Kau Forestry Reserve and Mount Collinson Prohibited Area were extended during the year, and all old fire barriers were cleared before the commencement of the dry season.

The total number of fires during the year was 116 as against 68 in 1928 and 30 in 1927. This was very largely due to the lack of rain, and extensive damage was done to Pine and other plantations. The most serious damage occurred on the day of the Ching Ming Festival, which was most unfortunately hot and dry, and 27 fires broke out in cemeteries and in the vicinity of graves. The total number of mature Pine trees killed by these fires was not less than 10,000; the whole of the damage was directly due to the careless handling of sacrificial papers, candles and fire-crackers. The Chung Yeung Festival was responsible for only two fires. The remainder were apparently caused by the dropping of lighted matches or tobacco.

*Insect Pests.*—Pine Tree Caterpillars (*Dendrolimus punctatus*) made their appearance in very small numbers and the amount of damage done by them was negligible.

*Forest Guards Service.*—The total number of persons arrested and charged with forestry offences by Forest Guards during the year was 156, of these 129 were fined or imprisoned, 18 cautioned, 4 had their bail estreated, cases against 2 were dismissed, 1 was bound over and cases against 2 were withdrawn.

The Police Department arrested and charged 98 persons with forestry offences, of these 90 were fined or imprisoned, 1 had bail estreated and 7 were discharged.

Full particulars of these cases are given in Tables I, II and IIA.

Organised raids on plantations were less frequent than usual. This was undoubtedly largely due to exemplary punishment inflicted by Police Magistrates and District Officers and to the absence of old offenders with one or more previous convictions, of whom 8 were banished during the year.

Courts of Inquiry under Ordinance No. 6 of 1917 were held at the villages of Lung Kwu Tan and Mui Tze Lam, where extensive illicit felling of wild trees had occurred. In both cases the villages were fined.

One contractor paid \$50 compensation for damage done to roadside trees.

*Forest Service Paths.*—The service path at Tai-po Kau Forestry Reserve was extended and other paths in all parts of the Colony were given such attention as they required.

#### AGRICULTURE, ETC.

The Ground Nut crop in all parts of the Colony was very poor, owing to the damage done by a fungoid disease.

An exhibit of foreign vegetables was staged at the New Territories Agricultural Show, which was held for the second time at Fan Ling.



The cultivation of foreign vegetables, during the winter season, is still on the increase in all parts of the Colony.

*Inspection of Nursery Stock and Vegetable Products.*—Thirteen consignments containing in all 127,940 bulbs of *Narcissus Tazetta* were inspected and certified as fit for export to Britain and the United States of America.

One hundred and thirty-four consignments of fresh and preserved vegetable products were inspected and certified as fit for export to the Philippine Islands.

#### SEED COLLECTION.

Seeds of the following were collected for local use and for the purpose of exchange:—*Artocarpus hypargyrea*, *Liquidambar chinensis*, *Strychnos angustifolia*, *Eucalyptus tereticornis*, *Melaleuca leucadendron*, *Albizzia Lebbek*, *Bischofia javanica*, *Celtis sinensis*, *Castanospermum australe*, *Ardisia crispa*, *Atalantia Hindsii*, *Garcinia oblongifolia*, *Acacia pennata*, *Leucaena glauca*, *Cassia fistula*, *Sapium sebifera*, *Sapium discolor*, *Melia Azedarach*, *Callistemon rigidus*, *Cinnamomum Camphora*, *Aleurites montana*, *Aleurites triloba*, *Aleurites Fordii*, *Pinus Massoniana*, *Casuarina equisetifolia*, *Cunninghamia sinensis*, *Glyptostrobilus heterophyllus*, *Bauhinia variegata*, *Tristania conferta*, *Sterculia lanceolata*, *Ficus retusa* and *Callistemon lanceolata*.

#### EXCHANGE OF SEEDS, &c.

The Department is indebted to the following donors of seeds, plants etc.:—Director, Royal Botanic Gardens, Kew; Director of Forests, Manila; Director of Agriculture, Bermuda; Conservator of Forests, British North Borneo; Professor W. Y. Chun; Messrs. H. Campbell (Cyprus); H. Humphreys; G. H. Potts, J. F. Grose; P. J. Wester (Manila) and R. C. Ching.

The following were the principal recipients:—Director, Botanical Gardens, Leningrad; Director of Agriculture, Bermuda; Sir Murchison Fletcher; Professor W. Y. Chun; Consulting Forest Engineer, Sydney; Conservator of Forests, British North Borneo; Director, Department of Agriculture, Giza, Egypt; Messrs. H. Humphreys; G. Grossman; J. F. Grose; Knowles A. Ryerson (U.S.A.); C. Woodrow; P. J. Wester (Manila); R. C. Pickering (U.S.A.) and W. Dixon (Australia).

#### REVENUE AND EXPENDITURE.

Statements of Revenue collected by the Department and comparison of Revenue and Expenditure are given in Tables III and IV.

H. GREEN,

*Superintendent.*

28th March, 1930.



Table I.

FOREST GUARDS, SERVICE: OFFENCE.

Village or District.	Block	Compartment.	REPORT OF:—									
			Pine tree stealing.	Pine tree branch stealing.	Pine cone stealing.	Brush-wood stealing.	Grass cutting.	Wild flower stealing.	Tree root stealing.	Cattle grazing in plantation.	Trespassing upon plantation.	Setting fire on plantation.
Victoria .....	1	A.B.C.E.G.	4	—	—	18	—	1	—	—	7	—
Wongneichung .	2	A.	2	—	—	2	—	—	—	—	2	—
Shaukiwan .....	3	B.C.D.E.	—	—	—	5	—	—	—	—	12	—
Tytam .....	4	A.	—	—	—	—	—	—	—	—	7	—
Stanley .....	5	—	—	—	—	—	—	—	—	—	—	—
Aberdeen .....	6	A.B.D.F.	2	1	—	3	—	—	—	—	2	—
Pokfulam .....	7	B.C.E.F.G.	2	—	—	6	—	—	—	—	8	—
Kowloon .....	8	—	1	2	—	—	—	—	—	4	2	—
Harbour Belt ..	9	A.B.C.	8	6	—	2	—	—	2	—	31	—
Cheungshawan .	10	—	—	—	—	—	—	—	—	—	—	—
Kang Hau .....	11	—	—	—	—	—	—	—	—	—	—	—
New Territories.	12	—	—	1	—	7	—	—	—	—	6	—
Total for 1929.....			19	10	—	43	—	1	2	4	77	—
Total for 1928 .....			47	16	1	97	4	10	2	3	98	3

**Table II.**

POLICE COURT RESULTS.		1929	1928
<i>Case.</i>			
\$ 1 to \$ 5 fine .....		25	52
\$ 6 „ \$10 „ .....		14	63
\$11 „ \$25 „ .....		15	13
\$26 „ \$50 „ .....		1	3
1 to 7 days' imprisonment .....		10	23
8 „ 14 „ „ .....		38	53
3 weeks' „ .....		13	29
4 „ „ .....		—	2
6 „ „ .....		—	4
1 month's „ .....		10	3
2 months' „ .....		1	1
3 „ „ .....		2	—
6 „ „ .....		—	1
Discharges .....		2	6
Cautions .....		18	25
Forfeiture of Bail .....		4	—
Cases withdrawn .....		2	—
Bound over .....		1	2
Detained for 24 hours .....		—	1
TOTAL .....		<u>156</u>	<u>281</u>

**Table IIA.**

FORESTRY OFFENCES, POLICE DEPARTMENT.		1929	1928
Number of Cases .....	*	81	128
Number of Offenders {	Convicted .....	90	135
	Bail estreated .....	1	—
	Discharged .....	7	10
TOTAL .....		<u>98</u>	<u>145</u>

\* Including 1 by District Watchmen as against 11 in 1928.



**Table III.**  
REVENUE.

Revenue.	1929	1928
	\$	\$
Timber Sales .....	4,102.25	3,084.32
Plant Sales .....	797.35	724.20
Loan of Plants .....	346.18	216.36
Forestry Licences .....	* 5,232.93	3,734.92
Sale of Condemned Stores .....	—	15.65
Other Miscellaneous Receipts....	† 1,383.48	1,044.37
Interest on Current Account...	23.78	29.53
Total .....	11,885.97	8,849.35

\* Collected by District Officer.

† Including \$1,360 for Inspection of Nursery Stock as against \$985 in 1928.

**Table IV.**

Comparative Statement of Revenue and Expenditure for the Year 1920-1929.

Year	Total Expenditure.	Total Revenue.	% of Revenue to Expenditure.
	\$	\$	
1920	55,975.49	8,547.76	15.27
1921	61,428.11	10,657.86	17.35
1922	71,223.47	12,464.32	17.50
1923	77,157.40	15,848.76	20.54
1924	86,516.80	13,038.79	15.07
1925	96,371.63	9,806.95	10.18
1926	87,642.19	10,798.95	12.32
1927	93,289.09	7,861.76	8.43
1928	96,597.70	8,849.35	9.16
1929	98,412.87	11,885.97	12.78









